

REMARKS

In the Office Action the Examiner noted that claims 1-6 and 11-22 are pending in the application, and the Examiner rejected all claims. By this Amendment, claim 23 has been added. No new matter has been presented. Thus, claims 1-6 and 11-23 are pending in the application. The Examiner's rejections are traversed below, and reconsideration of all rejected claims is respectfully requested.

Claim Rejections Under 35 USC §103

On pages 2-3 of the Office Action the Examiner rejected claims 1-6, 11, 13-14, 16-19, and 21 under 35 U.S.C. §103(a) as being unpatentable over Watanabe (JP 2003-79519 A) in view of Sharpe (US 2004/0016348 A1). The Applicant respectfully traverses the Examiner's rejection of these claims.

Claim 1 of the present application, as amended, recites:

A cooking apparatus, comprising:
a casing forming an enclosure of the cooking apparatus;
a temperature adjusting unit mounted on the casing, with an upper portion thereof protruding from an upper surface of the casing on which food is placed, wherein the temperature adjusting unit exchanges heat with the food to heat or cool the food; and
a temperature sensor to detect a temperature of the food or a container containing the food.

Therefore, the cooking apparatus claimed in claim 1 of the present application recites "a temperature sensor to detect a temperature of the food or a container containing the food." In other words, the temperature of the food or the container containing the food may be monitored while the temperature adjusting unit exchanges heat with the food to heat or cool the food. At least this element of claim 1 of the present application is not disclosed by either Watanabe nor Sharpe.

Watanabe does not disclose "a temperature sensor to detect a temperature of the food or a container containing the food." The Examiner states that Watanabe discloses a cooking apparatus having a temperature sensor 18. However, the temperature sensor 18 of Watanabe is located on the bottom surface of the heat conduction plate 12 of the cooking apparatus, and therefore merely monitors the temperature of the heat conduction plate 12 (Figure 1). Therefore, the temperature sensor 18 of Watanabe is separated from the food or any container containing

the food by at least the heat conduction plate 12 and the food backing plate 11 (Figure 1). As this temperature sensor 18 measures the temperature of the heat conduction plate 12 instead of the temperature of the food or food container located on the food backing plate 11, there could be a large difference in the temperatures of the heat conduction plate 12 and the food or food container. This provides much less accurate information and control to a user of the cooking apparatus.

The Examiner acknowledges this deficiency in Watanabe by stating that Watanabe "does not disclose allocation of a temperature sensor at the food or the food container." However, the Examiner goes on to state that "Sharpe teaches the use of a temperature sensor 11/11a located at food 20 or food container 12 coupled to a microprocessor 16 in cooking pan system [sic] for the purpose of sense [sic] the temperature of the food or the food container."

Sharpe discloses an electronic cooking pan system 10 with temperature sensors 11/11a embedded inside a thermally conductive pan 12 to monitor the temperature of the pan 12 (Figures 1 and 2). It is apparent from the disclosure of Sharpe that the temperature sensors 11/11a do not contact any food being cooked in the pan 12. Rather, the sensors 11/11a are embedded inside the structure of the pan 12, as is apparent in Figure 2. This is also supported by several sections in the disclosure of Sharpe. "A temperature sensor 11 may be calibrated to correspond to a temperature profile experienced by food 20, even though sensor 11 is not directly adjacent to food 20" (Paragraph [0036]). Therefore, Sharpe also does not disclose at least the feature of "a temperature sensor to detect a temperature of the food or a container containing the food," as is recited in claim 1 of the present application.

The Examiner is apparently characterizing the pan 12 as being tantamount to the "container containing the food" in claim 1 of the present application. However, the Applicant respectfully submits that this is not a reasonable interpretation of the claim, either by the claim language itself or considered with the specification. While the Examiner has identified the pan 12 as a "food container," the pan 12 is obviously a thermally conductive pan designed to deliver heat to the food 20 in order to cook the food 20, and is not a container as recited in claim 1 of the present application. The sensors 11/11a are merely monitoring the temperature of the cooking pan 12 itself, and is therefore more similar to the temperature detector 18 disclose in Watanabe. Claim 1 of the present application recites a cooking apparatus comprising a casing forming an enclosure of the cooking apparatus, and a temperature adjusting unit mounted on the casing, with an upper portion thereof protruding from an upper surface of the casing on which food is placed, wherein the temperature adjusting unit exchanges heat with the food to heat or

cool the food. Therefore, the cooking apparatus recited in claim 1 of the present application has an integrated temperature adjusting unit to exchange heat with the food, either directly with the food or with a container containing the food. The container containing the food is not a part of the cooking apparatus. By equating the pan 12 of Sharpe with the container recited in claim 1 of the present application, the Examiner is saying that the temperature adjusting unit which exchanges heat with the food is the same as the container containing the food, which is in direct contrast with claim 1 of the present application, which clearly differentiates between the temperature adjusting unit and the container containing the food. In other words, the temperature adjusting unit and the container containing the food are clearly two separate elements. If the pan 12 of Sharpe were considered to be the container containing the food as recited in claim 1 of the present application, then the sensors 11/11a would be integrated with the container, and would not be a part of the cooking apparatus as recited in claim 1 of the present application.

Further, even if the cooking pan 12 of Sharpe could in good faith be considered to be a container containing food as recited in claim 1 of the present application, and the Applicant respectfully submits that it could not, there would be no motivation to combine Sharpe with Watanabe. MPEP § 2142 states that "[w]hen the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the Examiner to explain why the combination of the teachings is proper." Here, the Examiner has simply stated, with no evidence to support the assertion, that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cooking apparatus of Watanabe in view of Sharpe such that a temperature sensor could be provided in order to sense the temperature of the food or the food container." The Examiner is required to present actual evidence and make particular findings related to the motivation to combine the teachings of the references. In re Kotzab, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." Dembiczak, 50 USPQ2d at 1617. "The factual inquiry whether to combine the references must be thorough and searching." In re Lee, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002) (citing McGinley v. Franklin Sports, Inc., 60 USPQ2d 1001, 1008 (Fed. Cir. 2001)). The factual inquiry must be based on objective evidence of record, and cannot be based on subjective belief and unknown authority. Id. at 1433-34. The Examiner must explain the reasons that one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious. In re Rouffet, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

There would be no motivation to combine Watanabe and Sharpe because there is no “food container” which could be envisioned as being a part of the cooking plate disclosed in Watanabe. The cooking plate disclosed in Watanabe is a self-contained unit upon which a user would place a container containing food, providing easy transport of the food to and from the cooking plate. Indeed, it would be counterintuitive to integrate a food container as a part of the cooking plate disclosed in Watanabe. The disclosure of Sharpe actually teaches away from the disclosure of Watanabe. While Watanabe discloses a relatively simple cooking plate, which is normally used in lieu of access to a proper cooking apparatus such as a stove, Sharpe discloses a cooking pan 12 with an integrated microprocessor as a control module 16 which wirelessly communicates with an electronic cooking system 200 which receives the signals from the control module 16 and controls output of a heating element 4 upon which the pan 12 rests (Paragraph [0037] and Figure 7). The Applicant respectfully submits that there is no reasonable motivation that could be offered to combine the two cited references.

To set forth a prima facie §103 rejection, there must be some evidenced reason for modifying a reference. Specifically, there must be evidence, outside of the present application, which motivates, leads, or suggests to one of ordinary skill to modify a reference (MPEP 2141). In order to implement the sensors 11/11a imbedded in the pan 12 of Sharpe, a wireless communication system must also be implemented to utilize the output of the sensors and adjust a supplied heat accordingly. Further, the cooking plate of Watanabe would then be limited to using only that container to be able to utilize the sensors 11/11a. No one of ordinary skill in the art would have reason to modify the simple cooking plate disclosed in Watanabe in such a manner.

Even further, the Applicant respectfully submits that the combination of the two references could not combine to disclose the cooking apparatus recited in claim 1 of the present application. The pan 12 of Sharpe does not generate heat, but merely conducts heat to food inside the pan 12. Therefore, the pan 12 is tantamount to the heat conduction plate 12 of Watanabe (the identical identifying numbers being merely coincidence). If the sensors 11/11a of Sharpe were integrated into the heat conduction plate 12 of Watanabe, there would still be a food backing plate 11 separating the heat conduction plate 12 and any food or container containing food on top of the cooking plate, which merely sense the temperature of the heat conduction plate 12 of the food backing plate 11, and would preclude the sensors 11/11a from being able “to detect a temperature of the food or a container containing the food,” as recited in claim 1 of the present application.

In order to set forth a proper §103 rejection, the cited references must combine to teach every element of the rejected claim. As discussed above, the cited references do not disclose at least “a temperature sensor to detect a temperature of the food or a container containing the food.” Further, as also discussed above, even if the combined references did disclose all of the elements of the rejected claim, there is no motivation to combine the two references. As a matter of fact, the disclosure of Sharpe teaches away from the disclosure of Watanabe, and therefore would actually discourage the combination of the two. Thus, the Applicant respectfully submits that claim 1 of the present application patentably distinguishes over the cited references, and further requests the withdrawal of the §103 rejection.

Claims 2-6, 11, and 13-14 depend from claim 1 and include all of the features of that claim plus additional features which are not taught or suggested by the cited references. Therefore, it is respectfully submitted that claims 2-6, 11, and 13-14 also patentably distinguish over the cited references.

Claim 16 of the present application also recites “a temperature sensor to detect a temperature of the food or a container containing the food.” As discussed above, the cited references, either alone or in combination, do not disclose at least this feature. Therefore, it is respectfully submitted that claim 16 also patentably distinguishes over Watanabe.

Claims 17-19 and 21 depend from claim 16 and include all of the features of that claim plus additional features which are not taught or suggested by the cited references. Therefore, it is respectfully submitted that claims 17-19 and 21 also patentably distinguish over the cited references.

On page 4 of the Office Action the Examiner rejected claim 22 under 35 U.S.C. §103(a) as being unpatentable over Watanabe in view of Sharpe and further in view of Michel (FR 2604882 A1). The Applicant respectfully traverses the Examiner’s rejection of this claim.

Claim 22 of the present application recites a “method of heating and cooling food in a container using a cooking apparatus having a heat generation unit and a temperature adjusting unit with a peltier element, the method comprising....detecting a temperature of the container.” As previously discussed, neither Watanabe nor Sharpe, either alone or in combination, disclose detecting a temperature of the container containing the food. Further, Michel discloses a cooking apparatus for cooking and temperature control of food, but does not cure the previously discussed deficiencies of Watanabe and Sharpe regarding detecting a temperature of a container containing food. Therefore, the Applicant respectfully submits that claim 22 of the present application also patentably distinguishes over the cited references.

On pages 4-5 of the Office Action the Examiner rejected claims 12, 15, and 20 under 35 U.S.C. §103(a) as being unpatentable over Watanabe in view of Sharpe as applied to claims 1 and 16, and further in view of Cauchy (US 6,282,906). The Applicant respectfully traverses the Examiner's rejection of these claims.

As discussed above in this Response, claims 1 and 16 patentably distinguish over Watanabe and Sharpe. Further, as Cauchy merely discloses the use of a DC power supply in a Peltier or thermoelectric food heating cooling system, Cauchy does not cure the deficiency of Watanabe and Sharpe in regard to claims 1 and 16 of the present application. Thus, as claims 12 and 15 depend from claim 1, and claim 20 depends from claim 16, and these dependent claims include all of the features of their respective independent claims plus additional features which are not taught or suggested by the cited references, it is respectfully submitted that claims 12, 15, and 20 also patentably distinguish over the cited references.

New claim 23

New claim 23 is directed to a cooking apparatus comprising "a temperature sensor contacting the food or a container containing the food to detect a temperature of the food or the container containing the food." As stated above, none of the cited references, either taken alone or in combination, suggest a temperature sensor to detect a temperature of the food or container containing the food. Therefore, it is respectfully submitted that claim 23 also patentably distinguishes over the cited references.

Summary

By this Amendment, claim 23 has been added. No new matter has been added. It is respectfully submitted that none of the cited references, either taken alone or in combination, disclose the presently claimed invention. It is further respectfully submitted that there is not even motivation to combine the references. Thus, claims 1-6 and 11-23 are pending and under consideration.

There being no further outstanding objections or rejections, it is respectfully submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

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Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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